Listing of the Claims

This listing of the claims replaces all the prior listings in the application.

1. (Currently Amended) A method for determining an individual's risk for obesity, wherein the individual is a human female, the method comprising: detecting presence of at least one obesity-related polymorphism in a frizzled-related protein (FRZB) gene, wherein the at least one obesity-related polymorphism is an A allele of a G19524A single nucleotide polymorphism (SNP) of the FRZB gene, represented by SEQ ID NO: 1, in a nucleic acid sample of the individual, wherein the presence of said A allele of G19524A provides an indication of the individual's risk for obesity.

2. (Previously presented) The method of claim 1, wherein the individual's risk for obesity is an increased risk as compared to an individual without the A allele of G19524A.

3-4. (Previously cancelled)

5. (Original) The method of claim 1, wherein the nucleic acid sample comprises DNA or RNA.

6-10. (Previously cancelled)

11. (Previously presented) The method of claim 1, wherein the A allele of G19524A is detected by sequencing.

12. (Previously presented) The method of claim 1, wherein the A allele of G19524A is detected by amplification.

13. (Original) The method of claim 12, wherein the amplification comprises a polymerase chain reaction or a ligase chain reaction.

14. (Previously presented) The method of claim 1, wherein the detecting comprises:

contacting the nucleic acid sample with at least one sequence-specific oligonucleotide under conditions that allow binding of said at least one oligonucleotide to the nucleic acid sample, wherein the at least one sequence-specific oligonucleotide hybridizes under stringent conditions to a region of the FRZB gene comprising the A allele of G19524A; and,

detecting the hybridization of the at least one oligonucleotide to the nucleic acid sample.

15. (Previously presented) The method of claim 1, wherein the detecting comprises:

amplifying the nucleic acid sample, thereby providing an amplified nucleic acid sample;

contacting the amplified nucleic acid sample with at least one sequence-specific oligonucleotide under conditions that allow binding of the oligonucleotide to the amplified nucleic acid sample, wherein the at least one sequence-specific oligonucleotide hybridizes under stringent conditions to a region of the FRZB gene comprising the A allele of G19524A; and,

detecting the hybridization of the at least one sequence-specific oligonucleotide to the amplified nucleic acid sample.

16. (Previously presented) The method of claim 1, wherein detecting the presence of the A allele of G19524A comprises qualitatively detecting the presence of the A allele of G19524A.

17. (Previously presented) The method of claim 1, wherein detecting the presence of the A allele of G19524A comprises quantitatively detecting the presence of the A allele of G19524A.

18. (Original) The method of claim 1, wherein the presence of the polymorphism inherited from one of the individual's parents provides an indication of the individual's risk for obesity, or wherein the presence of the polymorphism inherited from both of the individual's parents provides an indication of the individual's risk for obesity.

19. (Original) The method of claim 1, comprising performing at least one clinical test for obesity.

20. (Original) The method of claim 19, wherein performing the at least one clinical test for obesity comprises determining a body mass index (BMI) of the individual.

21. (Cancelled)

22. (Previously cancelled)

23-25. (Cancelled)

26-31. (Previously cancelled)

32-40. (Cancelled).

41-78. (Previously cancelled)